REMARKS

In response to the Examiner's Action mailed on April 16, 2004, claims 46 is canceled and claims 47 to 73 and claims 87 to 90 are amended. The applicant hereby respectfully requests that the patent application be reconsidered.

An item-by-item response to Examiner's objections or rejections is provided in the followings:

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1. ALLOWABLE SUBJECT MATTER

The Examiner instructs that Claims 1-45 and 91-101 are allowed over the prior art of record. The closest prior art of record, i.e. Gustavsson, U.S.P. No.6,374,019 is discussed below. Gustavsson does not teach or suggest the limitations including: a set of Bragg gratings disposed near a coupling region between first and second waveguides to reflect a reflecting optical signal back to the first waveguide and for transmitting a contra-directional optical signal and a co-directional optical signal having respectively a contra-directional selected wavelength corresponding to the Bragg gratings wherein one of the contra-directional and co-directional wavelengths is chosen as a designated wavelength and the reflecting optical signal and one of the contra-directional or co-directional optical signals are outside of a predefined range surrounding the designated wavelength. These limitations are recited in claims 1-45. Gustavsson 019' also does not teach or suggest a wavelength-selective optical transmission system including first and second vertically stacked optical waveguides of different propagation constants with a set of wavelength selective Bragg gratings between first and second optically waveguides, as is recited in claims 91-101.

The Examiner objects to Claims 47-90 as being dependent upon a July 15, 2004

rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. See the dependent claims listed for allowable features including the chemical compounds listed for the first and second waveguides and the contra-directional and co-directional wavelengths and their relationship to the set of Bragg gratings (described above) and also including the mathematical relationship between the wavelengths chosen and the propagation constant. These limitations are described in claims 47-90.

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In response to the objections, claims 47 to 90 are amended and claim 47 is amended as independent claim to include all the limitations of claim 46. Claims 47 to claims 90 are allowable as now amended.

II. Rejection of Claims under 35 USC §102

The Examiner rejects claim 46 under 35 U.S.C.102(b) as being anticipated by Gustavsson, (U.S.P. No.6,374,019).

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According to the Examiner, Gustavsson 019' teaches (Figs. 1-2) a wavelength-selective optical transmission system comprising: a first waveguide 1 for transmitting a multiplexed optical signal therethrough and a second waveguide 2 coupled to the first waveguide and wherein at least the coupling region between the first and second waveguides including a set of wavelength selective Bragg gratings 10,20,30,40 located in a gap between the first and second waveguide and the first and second waveguides has different propagation constants which clearly, fully meets Applicant's claimed limitations.

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In response to the rejections, claim 46 is canceled.

With the amended claims and the reasons provided above, the applicant hereby respectfully requests that Examiner's objections to claims 47 to 90 and rejections under 35 USC § 102 be withdrawn and the present application be allowed.

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Respectfully submitted Peiching Ling, et al

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